Singapore Banks Raise the Bar in Asia for Decarbonisation Targets

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Executive Summary

Singapore's three largest banks—DBS, OCBC, and UOB—have raised the bar for financial institutions in Asia with their sectoral-level strategies to reduce financed emissions in line with the goals of the Paris Agreement.

The Singapore banks' strategies, published as part of their commitment as members of the Net Zero Banking Alliance (NZBA), have developed targets for financed emission reductions by 2030 and 2050 in the power generation and oil and gas sectors. Targets have also been set for several other carbon-intensive industries, including steel, autos, shipping, aviation, real estate, and construction.

All three Singapore banks have set financed emissions targets for the power sector, aiming for a 100% reduction, or near to that, in power sector emissions intensity by 2050, with interim targets set for 2030.

DBS and OCBC, meanwhile, have both set financed emissions targets for the oil and gas sector, pledging to reduce financed emissions, on an absolute basis, by 92% and 95% by 2050 respectively, also including 2030 interim targets. Although UOB has opted not to set an emissions reduction target for oil and gas, it has joined OCBC in pledging not to offer project financing for new upstream oil and gas developments.

The Singapore banks have also developed their strategies to align with global reference pathways, such as the International Energy Agency's scenario for reaching net zero emissions by 2050, as well as those set by international industry groups for sectors such as shipping. In so doing, they have demonstrated that this approach is viable for financial institutions across Asia, including those that favour using regional approaches to map their own climate strategies. This includes Japanese banks, for example, which have to date set less ambitious interim targets for the power and oil and gas sectors.

Overall, no other Asian banks have yet committed to such comprehensive climate goals at the sectoral level for their financed emissions portfolios.

With public scrutiny of banks growing, pressure will steadily increase for these other banks to issue sectoral-level strategies that use recognised benchmarks, clear metrics, and Paris Agreement-aligned targets to achieve net zero financing of emissions by 2050.

Recommendations

- Asian banks should set clear sectoral strategies that are aligned with scenarios that aim for net zero financed emissions by 2050, which includes at least a medium-term interim target to be reached from a set baseline year

- Strategies should clearly identify the metrics used for each sector (such as absolute emissions or emissions intensity), the use of reference pathways, and the extent of coverage of each scope (1,2 and 3) as well of different parts of the supply chain

- Strategies for the oil and gas and thermal coal sector (mines and power plants) should include details on whether financing for new projects will be ceased, any timelines for the phasing out of existing projects, and whether there are any exemptions to these policies

- Strategies should include an assessment of the appropriate low carbon technologies the bank views as viable for the sector to reach net zero emissions and details on the level of engagement with customers to enable them to decarbonise their operations

- Strategies should initially be developed for the most carbon-intensive sectors, but eventually include the entire lending and investment portfolio, with clear disclosure of what activities (such as project and corporate finance, investment, and underwriting, for both financed and facilitated emissions) by the bank are being covered by interim and long-term targets

Introduction

Fig. 1 Singapore's DBS Bank leads the Asian region in setting 2030 and 2050 sectoral financed emissions targets.

Bank	Real Estate	Power	Oil & Gas	Aviation	Steel	Shipping	Automotive
DBS	Y	Y	Y	Y	Y	Y	Y
MUFG	*	*	*	-	*	*	-
Mizuho	-	*	*	-	-	-	-
SMBC	-	*	*	-	-	-	-

Note: "Y" denotes that the bank has a sectoral target for 2030 and 2050, "*" denotes a sectoral target for 2030, and "-" denotes no sectoral target
Source: Bank reports

Singapore banks' release of sectoral strategies puts them ahead regionally.

Singapore's three biggest banks, DBS, OCBC, and UOB, have published detailed sectoral decarbonisation strategies for reducing their financing of emissions from key carbon-intensive sectors, putting them ahead of regional peers among other ASEAN states and developed Asian markets such as Japan.

All three banks are members of the NZBA. As part of their NZBA membership commitment, DBS, OCBC and UOB have published strategies setting targets for reducing financing of emissions by 2030 and 2050 that cover the oil and gas sector as well as power generation, steel, autos, shipping, aviation, real estate, and construction.

Their strategies represent the most comprehensive efforts in the region to align financing to several specific carbon-intensive industries with globally established benchmarks, such as the International Energy Agency's (IEA) Net Zero Emissions by 2050 Scenario, or NZE scenario.

Japan's three largest banks—Mitsubishi UFJ Financial Group (MUFG), Sumitomo Mitsui Banking Corp. (SMBC), and Mizuho Bank—are also NZBA members. They have also published targets for some of these sectors, however, but they generally do not contain the same level of detail, scope, and ambition outlined by their three Singapore peers.

Sectoral Targets

Power Sector

Fig. 2 Comparison of power sector financed emissions targets between Singapore and Japanese banks

	DBS	OCBC	UOB		MUFG	MIZUHO	SMBC
2030 target	-47%	-55%	-65%		-41 to 52%	-40 to 64%	-41 to 58%
2050 target	-100%	-100%	-98%		NA	NA	NA
Baseline year	2020	2021	2021		2019	2020	2020
Scopes	1,3***	1,3	1,3		1	1	1
Metric*	Emissions intensity	Emissions intensity	Emissions intensity		Emissions intensity	Emissions intensity	Emissions intensity
Reference pathway	IEA NZE	IEA NZE	NGFS** (REMIND)		Well below 2C /1.5C	IEA SDS/NZE	IEA SDS/NZE
Financing for new thermal coal projects?	NO	NO	NO		NO	NO	NO

Notes: *$kgCO_2/MWh$ ** Network for Greening the Financial System *** Scope 1 includes power generation. Scope 3 includes equipment manufacturers.
Source: Bank reports, ARE estimates (for Japanese banks, by converting their 2030 targets, that are expressed in figures, to a % reduction from the stated figure in baseline year). MUFG, Mizuho, and SMBC have all committed to net zero emissions by 2050 from their respective total financed emissions portfolios.

Singapore Banks

Singapore banks target zero emissions intensity, or close to that, for the power sector by 2050.

All three Singapore banks have set 2030 and 2050 financed emissions targets for the power sector by using an emissions intensity metric ($kgCO_2/MWh$), rather than by targeting emissions cuts in absolute terms.

Each bank also aims for a 100% reduction, or near to that, in power sector emissions intensity: OCBC targets 0 $kgCO_2/MWh$ by 2040, DBS the same by 2050, while UOB is aiming for a 98% cut in emissions intensity by 2050—to 7 $kgCO_2/MWh$.

As their starting points, each bank has determined its financed emissions intensities for the power sector in a baseline year. For DBS, that was 260 $kgCO_2/MWh$ in 2020, while for OCBC it was 365 $kgCO_2/MWh$ in 2021. UOB's baseline is 365 $kgCO_2/MW$ in 2021.

They have also set interim power sector targets for 2030.

Long-term climate strategies are more robust if they include a credible interim target to provide an effective pathway to achieve net zero goals. To that end, DBS has set a target of cutting the emissions intensity in its power sector financing by 47% by 2030. OCBC targets a 55% reduction by 2030. UOB has set the most ambitious 2030 target of the three, aiming for a 65% cut by 2030 from its 2021 baseline.

Targeting emissions intensity technically allows the banks' financed emissions in the power sector to rise in absolute terms. But the banks say that using emissions intensity is more appropriate given that their power sector exposures are weighted towards ASEAN markets and Asia more broadly.

Their targets for emissions intensity, moreover, remain aligned with their pathways for achieving net zero emissions by 2050. DBS and OCBC adopted NZE as the reference pathway for achieving their targets, while UOB is using the Network for Greening the Financial System's (NGFS) REMIND model.

Japanese Banks

The three largest Japanese banks, MUFG, SMBC, and Mizuho, have not yet set specific, long-term 2050 targets for the power sector. They have, however, set targets for 2030, and like Singapore's banks, based them on emissions intensity rather than on an absolute emissions level.

Japan's largest banks have set a range for their 2030 targets.

Instead of adopting a single intensity target, however, the Japanese banks have adopted target ranges based on different IEA scenarios. MUFG aims to cut emissions intensity to between 156-192 gCO_2e/kWh by 2030 from 328 gCO_2e/kWh in 2019. It based its range's upper bound of 192 gCO_2e/kWh on the IEA's "well below 2C scenario," and its lower bound of 156 gCO_2e/kWh on the IEA's 1.5C scenario.

SMBC aims to reach 138-195 gCO_2/kWh from its 2020 emissions intensity of 332 gCO2/kWh. Mizuho's target range is 138-232 $kgCO_2$/MWh from a 2020 baseline of 388 $kgCO_2$/MWh. Both banks based their range's upper bound on the IEA's Sustainable Development Scenario (SDS) and their more ambitious lower bound on the IEA's NZE scenario.

While the Singapore banks' targets are all based on aligning with a 1.5C scenario, Japanese banks have used that scenario for only the most optimistic, lower bound of their targets, aiming for that as their best-case outcome.

Coal Financing

Singapore Banks

Singapore's banks have set new restrictions on coal financing.

Singapore's banks committed in 2019 to stop financing new thermal coal projects. Since then, the three banks have added further restrictions on their financing to the coal sector, both for coal-fired power plants (CFPP) and for mining of thermal coal.

In 2020, OCBC extended its ban on financing new coal plant projects to include coal mines and said it would not refinance or provide new financing to borrowers that rely on coal-fired power plants or thermal coal mines for more than 50% of their power generation capacity or revenue. OCBC said it will phase out over time its exposure to thermal coal assets although it has not said by what year.

DBS also prohibits financing of new CFFPs and coal mines and expects its remaining exposure to thermal coal assets to expire by 2039. The bank recently said that it would cease onboarding new customers that derive more than 25% of their revenue from thermal coal and would in 2026 stop financing customers that derive more than 50% of revenue from thermal coal—although this excludes financing projects for non-thermal coal or renewable energy.

UOB stopped financing new thermal coal projects or expansion of existing ones—including power plants and coal mines—in 2019. It has since committed to phasing out its remaining thermal coal assets by 2039. UOB also prohibits making new loans to borrowers in the power sector that rely on coal-fired power plants for more than 50% of their generating capacity.

Japanese Banks

Japan's largest banks have also imposed coal financing restrictions.

The three Japanese banks have also announced that they will cease financing new thermal coal projects, both CFPPs and coal mines. In some instances, however, their commitments to wind down support for existing projects included exceptions, such as if a project contributes to a country's energy security. The Japanese banks have also committed to stop financing coal-fired power generation and thermal coal mining by 2040.

Oil and Gas

Fig. 3 Comparison of oil and gas financed emissions targets between Singapore and Japanese banks

	DBS	OCBC	UOB		MUFG	MIZUHO		SMBC
2030 target	-28%	-35%	NA		-15 to 28%	-36%	-12 to 29%	-12 to 29%
2050 target	-92%	-95%	NA		NA	NA	NA	NA
Baseline year	2020	2021	NA		2019	2020	2020	2020
Scopes included	1 to 3	1 to 3			1 to 3	1 ,2	3	1 to 3
Metric*	Absolute emissions	Absolute emissions	NA		Absolute emissions	Emissions intensity	Absolute emissions	Absolute emissions
Reference pathway	IEA NZE	IEA NZE	NA		Well below 2C /1.5C	IEA SDS/NZE	IEA SDS/NZE	IEA SDS/NZE
Financing for new oil and gas projects?	YES	NO	NO		YES	YES	YES	YES

Note: * $MtCO_2e/MtCO_2$

Source: Bank reports. MUFG, Mizuho, and SMBC have all committed to net zero emissions by 2050 from their total respective financed emissions portfolios.

Singapore Banks

Singapore's banks have set new targets for the oil and gas sector.

DBS and OCBC have both set financed emissions targets for the oil and gas sector. UOB has opted not to do so, however. UOB has, however, joined OCBC in pledging not to offer project financing for new upstream oil and gas developments, something DBS has not done.

Both DBS and OCBC have adopted NZE as the reference pathway for their oil and gas targets. But unlike their power sector targets, they have applied absolute emissions as their target metric.

DBS targets a 28% reduction in financed emissions by 2030, to 27.7 $MtCO_2e$, and a 92% reduction by 2050, to 3 $MtCO_2e$, from a 2020 baseline of 38.6 $MtCO_2e$. OCBC aims to reduce financed emissions 35% by 2030, to 9.6 $MtCO_2e$, and 95% by 2050, to 0.8 $MtCO_2e$, from a 2020 baseline of 14.8 $MtCO_2e$.

Both DBS and OCBC cover the full life cycle of emissions—from customers' own Scope 1 and 2 emissions, as well as Scope 3 emissions, which includes end use of oil and gas products. DBS' financed emissions target for the oil and gas sector include upstream, downstream, and integrated companies, which it says makes its target one the most extensive set to date by any financial institution for the sector.

OCBC has included only upstream and integrated companies, taking the view that emissions reductions will flow to the downstream part of the oil and gas value chain. OCBC has also pledged not to finance upstream oil and gas projects that have been approved for development after 2021. That pledge is based on the IEA's 1.5C scenario pathway, which states that the oil and gas fields approved for development by 2021 are sufficient in a scenario where there is a global transition away from reliance on fossil fuels.

UOB, in contrast, has chosen not to set a financed emissions reduction pathway for oil and gas. Based on its loans to the oil and gas sector, UOB said it had concluded that, for this sector, globally set decarbonisation pathways such as the IEA's were not realistic for achieving a just transition in Asia.

Japanese Banks

Japanese banks' targets for oil and gas are not as ambitious.

Targets for financed emissions in oil and gas at Japan's three largest banks are less ambitious compared with those set by DBS and OCBC. The Japanese banks have set targets for 2030 for the sector, but not for 2050, and none of the three Japanese banks has committed, as OCBC and UOB have done, to stop financing new upstream oil and gas projects.

MUFG's target, like those at Singapore's banks, is based on an absolute level of financed emissions and includes Scope 1, 2 and 3 emissions. As with its power sector target, however, MUFG's target spans a range: the bank aims to reduce financed emissions to the oil and gas sector by 15% to 28% by 2030 from a 2019 baseline of 84 $MtCO_2e$.

Mizuho has split its 2030 target for the sector, using emissions intensity for Scope 1 and 2 emissions, but a range of absolute reductions for Scope 3 emissions. For Scope 1 and 2 emissions, Mizuho aims to reduce emissions intensity to 4.2 gCO_2e/MJ by 2030 from 6.6 gCO_2e/MJ in 2019, a target it says is aligned with NZE. For Scope 3 emissions, Mizuho targets a reduction of between 12% and 29% by 2030, from a 60.6 $MtCO_2e$ in 2019, with the 12% lower bound based on the IEA's SDS scenario and the 29% upper bound based on NZE.

SMBC has set a similar target in absolute terms for oil and gas, pledging to reduce financed emissions from the sector by between 12% and 29% by 2030 from 56.9 MtCO2e in 2021. SMBC also says its range is aligned with the IEA's SDS and NZE scenarios.

The 2030 targets set by Japanese banks for the oil and gas sector are therefore not as ambitious as those set out by DBS and OCBC, and as with the power sector, specific sectoral targets for 2050 have not yet been identified. Furthermore, none of the three Japanese banks have committed to cease financing of new upstream oil and gas projects, unlike OCBC and UOB.

Other Sectors

Singapore's banks have also set targets for other carbon-intensive sectors.

Singapore's three banks have provided detailed financed emissions targets for several other carbon-intensive sectors, as well.

DBS, OCBC, and UOB have outlined net zero financed emissions strategies for steel and real estate. DBS and OCBC have released strategies for aviation and shipping. UOB and DBS have outlined a strategy for the automotive sector. UOB has one for the construction sector, as well.

The extent to which the Singapore banks have committed to detailed sectoral decarbonisation pathways for sectors beyond power and oil and gas exceeds that of their regional peers.

Conclusion

Singaporean banks lead the way in Asia in decarbonisation strategies for financed emissions.

Singapore's banks have moved ahead of regional peers, including those in other developed markets such as Japan, by issuing decarbonisation pathways for up to eight key carbon-intensive sectors that align their financed emissions strategies with the goal of achieving net zero financed emissions by 2050.

While all three had already committed to stop financing new thermal coal assets, two of Singapore's banks have gone further, committing not to finance new upstream oil and gas projects.

The three Singapore banks have also formulated strategies for carbon-intensive industries such as steel, aviation, and shipping—"hard-to-abate" sectors—that apply interim targets along with long-term aims, all based on pathways established by industry initiatives.

As 2030 fast approaches, the banks now face the challenge of implementing their strategies and achieving their interim targets. Doing so will depend on effectively engaging with customers, attaining robust GHG emissions data, and on the availability of technologies needed to decarbonise hard-to-abate sectors.

The scope of banks' activities beyond financed emissions, including facilitated emissions, will come under greater scrutiny over time, meaning that pressure to include other activites such as underwriting in decarbonisation strategies will increase as well. All banks in the region will need to therefore be aware of this as they assess their strategies going forward.

Although there has been an emerging push for region-specific pathways to further the energy transition, DBS, OCBC, and UOB have, for the most part, developed their decarbonisation strategies using global benchmarks like those established by the IEA. In doing so, they have demonstrated that such benchmarks are also appropriate for other Asian banks.

By leading the way with these sectoral strategies, Singapore's three banks have laid down a challenge for other banks in the region to raise their level of climate ambition. The onus is on Asian banks that have joined the NZBA, in particular, to live up to their commitment to develop sectoral-level plans for reaching net zero financed emissions by 2050.

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